

Abstract

The invention is directed to methods for the creation and use of libraries of proteins which comprise polyclonal antibodies to a common antigen or group of antigens, receptor proteins with related variable regions, or other immune related proteins with variable regions. These polyclonal antibody libraries can be used to treat or prevent diseases and disorders including neoplasia such as cancer and other malignancies, parasitic infections, bacterial infections, viral infections and disorders such as genetic defects and deficiencies. Protein libraries may be patient-specific, disease-specific or both patient- and disease-specific. Libraries can also be used to detect a disease or disorder in a patient either by direct imaging or through the use of a diagnostic kit. The invention further includes novel cloning methods for the creation and transfer of nucleic acid sequences encoding protein variable regions and novel cloning vectors.